



## General

#### Title

Statin therapy for patients with cardiovascular disease: percentage of males 21 to 75 years of age and females 40 to 75 years of age during the measurement year who were identified as having clinical ASCVD who were dispensed at least one high- or moderate-intensity statin medication.

## Source(s)

National Committee for Quality Assurance (NCQA). HEDIS 2016: Healthcare Effectiveness Data and Information Set. Vol. 1, narrative. Washington (DC): National Committee for Quality Assurance (NCQA); 2015. various p.

National Committee for Quality Assurance (NCQA). HEDIS 2016: Healthcare Effectiveness Data and Information Set. Vol. 2, technical specifications for health plans. Washington (DC): National Committee for Quality Assurance (NCQA); 2015. various p.

## Measure Domain

# Primary Measure Domain

Clinical Quality Measures: Process

# Secondary Measure Domain

Does not apply to this measure

# **Brief Abstract**

# Description

This measure is used to assess the percentage of males 21 to 75 years of age and females 40 to 75 years of age during the measurement year who were identified as having clinical atherosclerotic cardiovascular disease (ASCVD) and who were dispensed at least one high- or moderate-intensity statin medication during the measurement year.

See the related National Quality Measures Clearinghouse (NQMC) summary of the National Committee for Quality Assurance (NCQA) measure Statin therapy for patients with cardiovascular disease: percentage of males 21 to 75 years of age and females 40 to 75 years of age during the measurement year who were identified as having clinical ASCVD who remained on a high- or moderate-intensity statin medication for

#### Rationale

Cardiovascular disease is the leading cause of death in the United States. More than 85 million American adults have one or more types of cardiovascular disease (Mozaffarian et al., 2015). It is estimated that by 2030, more than 43 percent of Americans will have a form of cardiovascular disease (Heidenreich et al., 2011). In 2011, the total cost of cardiovascular disease and stroke in the United States was estimated to be \$320 billion. This total includes direct costs such as the cost of physicians and other health professionals, hospital services, prescribed medications and home health care, as well as indirect costs due to loss of productivity from premature mortality.

Interventions to address cardiovascular disease are increasing: since 2000, the number of inpatient cardiovascular operations and procedures increased by 28 percent, from 5,939,000 to 7,588,000 (Mozaffarian et al., 2015). By 2030, direct medical costs for cardiovascular disease are projected to increase to nearly \$918 billion (Heidenreich et al., 2011).

Statins (3-hydroxy-3-methylglutaryl-coenzyme [HMG-CoA] reductase inhibitors) are a class of drugs that lower blood cholesterol. Statins work in the liver by preventing the formation of cholesterol, thus lowering the amount of cholesterol in the blood (American Heart Association [AHA], 2014). Statins are most effective in lowering low-density lipoprotein cholesterol (LDL-C). The amount of cholesterol-lowering effect is based on statin intensity, which is classified as either high, moderate or low.

Statins are among the most commonly prescribed medications in the United States, accumulating \$17 billion in sales in 2012 (Consumer Reports, 2014). According to recent blood cholesterol treatment guidelines from the American College of Cardiology (ACC) and AHA, statins of moderate or high intensity are recommended for adults with established clinical atherosclerotic cardiovascular disease (ASCVD). Many studies support the use of statins to reduce ASCVD events in primary and secondary prevention.

One meta-analysis of data from 170,000 patients in 26 randomized controlled trials found that intensive statin therapy reduces major vascular events by 15 percent (Cholesterol Treatment Trialists' [CTT] Collaboration, 2010). The study also found a 13 percent reduction in coronary death or nonfatal myocardial infarction, a 19 percent reduction in coronary revascularization and a 16 percent reduction in ischemic stroke (CTT Collaboration, 2010).

Another systematic review and meta-analysis estimates that long term statin therapy reduces the risk for ASCVD events by 25 percent to 45 percent (Law, Wald, & Rudnicka, 2003)

Guideline recommendations: ACC/AHA. For men and women 21 to 75 years of age with a diagnosis of clinical ASCVD, high-intensity statin therapy is recommended. If high-intensity therapy is contraindicated, or when adverse effects are present, moderate-intensity statin therapy should be used (Stone et al., 2013).

#### Evidence for Rationale

American Heart Association (AHA). Drug therapy for cholesterol. [internet]. Dallas (TX): American Heart Association (AHA); 2014 [accessed 2015 Jan 11].

Cholesterol Treatment Trialists' (CTT) Collaboration, Baigent C, Blackwell L, Emberson J, Holland LE, Reith C, Bhala N, Peto R, Barnes EH, Keech A, Simes J, Collins R. Efficacy and safety of more intensive lowering of LDL cholesterol: a meta-analysis of data from 170,000 participants in 26 randomised trials. Lancet. 2010 Nov 13;376(9753):1670-81. [49 references] PubMed

Consumer Reports. Are you taking the right treatment for your high cholesterol?. [internet]. Harlan (IA): Consumer Reports; 2014 Mar.

Heidenreich PA, Trogdon JG, Khavjou OA, Butler J, Dracup K, Ezekowitz MD, Finkelstein EA, Hong Y, Johnston SC, Khera A, Lloyd-Jones DM, Nelson SA, Nichol G, Orenstein D, Wilson PW, Woo YJ, American Heart Association Advocacy Coordinating Committee, Stroke Council, Council on Cardiovascular Radiology and Intervention, Council on Clinical Cardiology, Council on Epidemiology and Prevention, Council on Arteriosclerosis, Thrombosis and Vascular Biology, Council on Cardiopulmonary, Critical Care, Perioperative and Resuscitation, Council on Cardiovascular Nursing, Council on the Kidney in Cardiovascular Disease, Council on Cardiovascular Surgery and Anesthesia, and Interdisciplinary Council. Forecasting the future of cardiovascular disease in the United States: a policy statement from the American Heart Association. Circulation. 2011 Mar 1;123(8):933-44. PubMed

Law MR, Wald NJ, Rudnicka AR. Quantifying effect of statins on low density lipoprotein cholesterol, ischaemic heart disease, and stroke: systematic review and meta-analysis. BMJ. 2003 Jun 28;326(7404):1423. PubMed

Mozaffarian D, Benjamin EJ, Go AS, Arnett DK, Blaha MJ, Cushman M, de Ferranti S, Despres JP, Fullerton HJ, Howard VJ, Huffman MD, Judd SE, Kissela BM, Lackland DT, Lichtman JH, Lisabeth LD, Liu S, Mackey RH, Matchar DB, McGuire DK, Mohler ER, Moy CS, Muntner P, Mussolino ME, Nasir K, Neumar RW, Nichol G, Palaniappan L, Pandey DK, Reeves MJ, Rodriguez CJ, Sorlie PD, Stein J, Towfighi A, Turan TN, Virani SS, Willey JZ, Woo D, Yeh RW, Turner MB, American Heart Association Statistics Committee and Stroke Statistics Subcommittee. Heart disease and stroke statistics-2015 update: a report from the American Heart Association. Circulation. 2015 Jan 27;131(4):e29-322. PubMed

National Committee for Quality Assurance (NCQA). HEDIS 2016: Healthcare Effectiveness Data and Information Set. Vol. 1, narrative. Washington (DC): National Committee for Quality Assurance (NCQA); 2015. various p.

National Committee for Quality Assurance (NCQA). HEDIS 2016: Healthcare Effectiveness Data and Information Set. Vol. 2, technical specifications for health plans. Washington (DC): National Committee for Quality Assurance (NCQA); 2015. various p.

Stone NJ, Robinson JG, Lichtenstein AH, Bairey Merz CN, Blum CB, Eckel RH, Goldberg AC, Gordon D, Levy D, Lloyd-Jones DM, McBride P, Schwartz JS, Shero ST, Smith SC Jr, Watson K, Wilson PW. 2013 ACC/AHA guideline on the treatment of blood cholesterol to reduce atherosclerotic cardiovascular risk in adults: a report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines. J Am Coll Cardiol. 2014 Jul 1;63(25 Pt B):2889-934. [144 references] PubMed

# Primary Health Components

Clinical atherosclerotic cardiovascular disease (ASCVD); statin therapy; high or moderate-intensity statin medication

# **Denominator Description**

Male members age 21 to 75 years and female members age 40 to 75 years as of December 31 of the measurement year who were identified as having clinical atherosclerotic cardiovascular disease (ASCVD) (see the related "Denominator Inclusions/Exclusions" field)

# **Numerator Description**

The number of members who had at least one dispensing event for a high or moderate-intensity statin medication during the measurement year (see the related "Numerator Inclusions/Exclusions" field)

# Evidence Supporting the Measure

## Type of Evidence Supporting the Criterion of Quality for the Measure

A clinical practice guideline or other peer-reviewed synthesis of the clinical research evidence

A formal consensus procedure, involving experts in relevant clinical, methodological, public health and organizational sciences

A systematic review of the clinical research literature (e.g., Cochrane Review)

One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

## Additional Information Supporting Need for the Measure

Unspecified

## **Extent of Measure Testing**

All HEDIS measures undergo systematic assessment of face validity with review by measurement advisory panels, expert panels, a formal public comment process and approval by the National Committee for Quality Assurance's (NCQA's) Committee on Performance Measurement and Board of Directors. Where applicable, measures also are assessed for construct validity using the Pearson correlation test. All measures undergo formal reliability testing of the performance measure score using beta-binomial statistical analysis.

## Evidence for Extent of Measure Testing

Rehm B. (Assistant Vice President, Performance Measurement, National Committee for Quality Assurance, Washington, DC). Personal communication. 2015 Mar 16. 1 p.

# State of Use of the Measure

#### State of Use

Current routine use

#### Current Use

not defined yet

# Application of the Measure in its Current Use

# Measurement Setting

Ambulatory/Office-based Care

Hospital Inpatient

Hospital Outpatient

## Professionals Involved in Delivery of Health Services

not defined yet

## Least Aggregated Level of Services Delivery Addressed

Single Health Care Delivery or Public Health Organizations

## Statement of Acceptable Minimum Sample Size

Unspecified

## Target Population Age

- Males age 21 to 75 years
- Females age 40 to 75 years

## **Target Population Gender**

Either male or female

# National Strategy for Quality Improvement in Health Care

# National Quality Strategy Aim

Better Care

# National Quality Strategy Priority

Prevention and Treatment of Leading Causes of Mortality

# Institute of Medicine (IOM) National Health Care Quality Report Categories

#### IOM Care Need

Living with Illness

#### **IOM Domain**

Effectiveness

## Data Collection for the Measure

## Case Finding Period

The measurement year and the year prior to the measurement year

## **Denominator Sampling Frame**

Enrollees or beneficiaries

## Denominator (Index) Event or Characteristic

Clinical Condition

Encounter

Institutionalization

Patient/Individual (Consumer) Characteristic

Therapeutic Intervention

#### **Denominator Time Window**

not defined yet

## Denominator Inclusions/Exclusions

Inclusions

Male members age 21 to 75 years and female members age 40 to 75 years as of December 31 of the measurement year who were identified as having clinical atherosclerotic cardiovascular disease (ASCVD)

Members are identified for the eligible population in two ways: by event or by diagnosis. The organization must use *both* methods to identify the eligible population, but a member only needs to be identified by one method to be included in the measure.

Event. Any of the following during the year prior to the measurement year meet criteria:

Myocardial infarction (MI). Discharged from an inpatient setting with an MI (MI Value Set). To identify discharges:

Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set). Identify the discharge date for the stay.

Coronary artery bypass graft (CABG). Members who had CABG (CABG Value Set) in any setting.

Percutaneous coronary intervention (PCI). Members who had PCI (PCI Value Set) in any setting.

Other revascularization. Members who had any other revascularization procedures (Other Revascularization Value Set) in any setting.

*Diagnosis*. Identify members as having ischemic vascular disease (IVD) who met at least one of the following criteria during both the measurement year and the year prior to the measurement year. Criteria need not be the same across both years.

At least one outpatient visit (Outpatient Value Set) with an IVD diagnosis (IVD Value Set), or

At least one acute inpatient encounter (Acute Inpatient Value Set) with an IVD diagnosis (IVD Value Set).

#### Note:

Members must have been continuously enrolled for the measurement year and the year prior to the measurement year. *Allowable Gap*: No more than one gap in enrollment of up to 45 days during each year of continuous enrollment. To determine continuous enrollment for a Medicaid beneficiary for whom enrollment is verified monthly, the member may not have more than a 1-month gap in coverage.

#### Exclusions

Exclude members who meet any of the following criteria:

Pregnancy (Pregnancy Value Set) during the measurement year or year prior to the measurement year.

In vitro fertilization (IVF Value Set) in the measurement year or year prior to the measurement year. Dispensed at least one prescription for clomiphene (refer to Table SPC-A in the original measure documentation for medications to identify exclusions) during the measurement year or the year prior to the measurement year.

End-stage renal disease (ESRD) (ESRD Value Set) during the measurement year or the year prior to the measurement year.

Cirrhosis (Cirrhosis Value Set) during the measurement year or the year prior to the measurement year.

Myalgia, myositis, myopathy, or rhabdomyolysis (Muscular Pain and Disease Value Set) during the measurement year.

#### Value Set Information

Measure specifications reference value se	ets that must be used for HEDIS reporting. A value set is the
complete set of codes used to identify th	ne service(s) or condition(s) included in the measure. Refer to the
NCQA Web site	to purchase HEDIS Volume 2, which includes the Value Set
Directory.	

## **Exclusions/Exceptions**

not defined yet

# Numerator Inclusions/Exclusions

#### Inclusions

The number of members who had at least one dispensing event for a high- or moderate-intensity statin medication during the measurement year. Refer to Table SPC-B in the original measure documentation for a list of high- and moderate-intensity statin medications.

Exclusions

Unspecified

#### Value Set Information

Measure specific	ations reference value sets that must be used for HEDIS reporting. A value set is the
complete set of	codes used to identify the service(s) or condition(s) included in the measure. Refer to the
NCQA Web site	to purchase HEDIS Volume 2, which includes the Value Set
Directory.	

# Numerator Search Strategy

Fixed time period or point in time

#### **Data Source**

Pharmacy data

## Type of Health State

Does not apply to this measure

## Instruments Used and/or Associated with the Measure

Unspecified

# Computation of the Measure

## Measure Specifies Disaggregation

Does not apply to this measure

## Scoring

Rate/Proportion

## Interpretation of Score

Desired value is a higher score

# Allowance for Patient or Population Factors

not defined yet

# Description of Allowance for Patient or Population Factors

This measure requires that separate rates be reported for commercial, Medicaid, and Medicare product lines.

Report two age/gender stratifications and a total rate:

Males 21 to 75 years as of December 31 of the measurement year Females 40 to 75 years as of December 31 of the measures year Total  $\frac{1}{2}$ 

# Standard of Comparison

not defined yet

# **Identifying Information**

Original Title

#### Original riac

Statin therapy for patients with cardiovascular disease (SPC): received statin therapy.

#### Measure Collection Name

HEDIS 2016: Health Plan Collection

#### Measure Set Name

Effectiveness of Care

#### Measure Subset Name

Cardiovascular Conditions

#### Submitter

National Committee for Quality Assurance - Health Care Accreditation Organization

## Developer

National Committee for Quality Assurance - Health Care Accreditation Organization

# Funding Source(s)

Unspecified

# Composition of the Group that Developed the Measure

National Committee for Quality Assurance's (NCQA's) Measurement Advisory Panels (MAPs) are composed of clinical and research experts with an understanding of quality performance measurement in the particular clinical content areas.

# Financial Disclosures/Other Potential Conflicts of Interest

In order to fulfill National Committee for Quality Assurance's (NCQA's) mission and vision of improving health care quality through measurement, transparency and accountability, all participants in NCQA's expert panels are required to disclose potential conflicts of interest prior to their participation. The goal of this Conflict Policy is to ensure that decisions which impact development of NCQA's products and services are made as objectively as possible, without improper bias or influence.

# Adaptation

This measure was not adapted from another source.

# Date of Most Current Version in NQMC

2015 Oct

#### Measure Maintenance

Unspecified

## Date of Next Anticipated Revision

Unspecified

#### Measure Status

This is the current release of the measure.

## Measure Availability

Source available for purchase from the National Committee for Quality Measurement (NCQA) Web sit	е
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For more information, contact NCQA at 1100 13th Street, NW, Suite 1000, Washington, DC 20005; Ph	none:
202-955-3500: Fax: 202-955-3599: Web site: www.ncga.org	

## Companion Documents

The following is available:

National Committee for Quality Assurance (NCQA). HEDIS 2016: Healthcare Effectiveness Data and Information Set. Vol. 2, technical update. Washington (DC): National Committee for Quality Assurance (NCQA); 2015 Oct 1. 12 p.

For more	informa	ation, contact	the Natio	nal Comr	nittee for	Quality	Assurance	(NCQA)	at 1100	13th	Street,
NW, Suite	e 1000,	Washington	DC 2000!	5; Phone:	202-955-	3500; Fa	ax: 202-95	5-3599; \	Web site	e:	
www.ncq	a.org 🗀										

# **NQMC Status**

This NQMC summary was completed by ECRI Institute on January 11, 2016.

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# **Production**

## Source(s)

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